

## **REMARKS**

[0001] Claims 1, 5-8, 11-13, 17-19, and 23-24 are all the claims pending in the application.

[0002] Claims 1, 7, 13 and 19 are amended for clarification purposes. In particular, the amendments clarify the composition of the learning protocol and correct a minor typographical error in claim 19. Support may be found in the Application as Published, at for example, p. 5, para. 9, ll. 10-15. Applicant respectfully submits that entry of the currently amended claims is proper because the currently amended claims will either place the application in condition for allowance. Applicant further respectfully submits that no new matter is added to the currently amended claims, nor has the scope of the pending claims changed. Accordingly, no new issues are raised that necessitate a further search of art. Applicant respectfully traverses the rejections based on the following discussion.

### **I. The Prior Art Rejections**

[0003] Claims 1, 5-8, 11-13, and 17-18 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,226,627 to Polak, (hereinafter, Polak) in view of U.S. Patent 6,625,500 to Li, (hereinafter, Li).

[0004] Polak describes a dependency action system that provides for resilient processing based on homogenously and heterogenously redundant functionality, (see for example, Polak, col. 4, ll. 45-65). In Polak, additional instances of the same code or alternate code sequences are used to provide redundancy.

[0005] However, Applicant respectfully submits that Polak fails to disclose, teach or even suggest at least the features directed to: 1) inputting a selection command that selects one function from a list of pre-selected functions for input into said computer program at a point of choice determined by a programmer, wherein each function from said list of pre-selected functions is associated with a reward; and 2) allowing a learning protocol comprised of learning instructions in said computer program to track and reward said one function that is selected and to determine an approximate optimal choice of operation of said computer program based on said selection command, as recited in independent claim 1 and similarly recited in independent claims 1, 7 and 13.

[0006] The Communication asserts feature 1 of claim 1 is disclosed by the use of “[a] selection rule to determine which of the enabled actions is to be executed.” Applicants respectfully submit that Polak’s selection rules are merely preference relations that specify if one action is to be preferred over another action. (see for example, Polak, col. 8, ll. 4-15). Polak’s specification of a preference relation between two actions simply does not indicate where “a point of choice determined by the programmer” would be located.

[0007] The Communication asserts feature 2 of claim 1 is disclosed by that Fig. 13 and col. 49-57. The cited portions, Fig. 13 and col. 49-57 merely provide further description of the preference policy and associated preference relations previously discussed at for example, Polak, col. 7, ll. 54-57. The Communication either impermissibly ignores the claim term “learning protocol” or conflates the term with “[a] trivial selection rules that picks one of the enabled actions at random”, (see for example, Communication, p. 3, ll. 3-7). Learning protocols are discussed in the specification, (see for example, Application as Published, para. 9, 18, 22). The

claims recite a system in which the learning protocol is comprised of programmer selected learning instructions.

[0008] The Communication admits that Polak fails to disclose “each function from said list of pre-selected functions is associated with a reward”. The Communication attempts to remedy these admitted deficiencies by combining Polak with Li.

[0009] Li merely describes a method for computer-generating interaction-specific knowledge bases for rapidly improving or optimizing the performance of an object by performing according to computer-designed test matrices several automatic experimental cycles on selected control variables. Subsequent test-cycles new test matrices are designed to minimize or remove at least one two-variable interaction from the main effect of designated control variable, (see for example, Li, Abstract).

[0010] Li fails to remedy any of the above noted deficiencies of Polak. Thus, claims 1, 7 and 13 define patentable subject matter over Li. Claims 5-6, 8, 11-12 and 17-18 depend from claims 1, 7 and 13 and therefore define patentable subject matter for at least the same reasons.

[0011] Claims 19, and 23-24 are rejected under 35 U.S.C. §103(a) over Polak in view of Li and further in view of U.S. Patent No. 5,333,304 to Christensen et al., (hereinafter, Christensen). Applicants respectfully traverse these rejections based on the following discussion.

[0012] The Communication admits that the asserted combination of Polak-Li fails to disclose “a pre-compiler that inputs a selection command at a point of choice, determined by a programmer, into a computer program that runs on a computer, said selection command selecting one function from a list of pre-selected functions for input into said computer program”,

(Communication, p. 8, ll. 16-20. The Communication attempts to remedy these additional admitted deficiencies by combining Polak-Li with Christensen.

[0013] Applicants submit that the asserted Polak-Li-Christensen combination fail to disclose, teach or even suggest at least the feature of: 1) a pre-complier that inputs a selection command at a point of choice, determined by a programmer, into a computer program that runs on a computer, said selection command selecting one function from a list of pre-selected functions for input into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and 2) a processor adapted to execute a learning protocol in said computer program to track and reward said one function that is selected and determine an approximate optimal operation of said computer program based on at least said selection command, as recited in independent claim 19.

[0014] Christensen merely describes a system for “evaluating software application performance utilizing a compiler application”, (see for example, Christensen, Abstract, ll. 1-2). Christensen’s system uses a prelude routine which when activated stores the execution information at that point in time. (see for example, Christensen, col. 2, ll. 21-27 and col. 7, ll. 3-37). However, even assuming arguendo that Christensen could be properly combined with Polak-Li, the combination still fails to remedy the deficiencies noted above. Thus, independent claim 19 defines patentable subject matter over Polak, Li and/or Christensen. Claims 23-24 depend from claim 19 and therefore defines patentable subject matter for at least the same reason.

[0015] The claimed invention, as provided in amended independent claims 1, 7, 13, and 19 contain features, which are patentably distinguishable from the prior art references of record.

[0016] Moreover, the Applicants note that all claims are properly supported in the specification and accompanying drawings, and no new matter is being added. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

## **II. Formal Matters and Conclusion**

[0017] Claims 1, 5-8, 11-13, 17-19, and 23-24 are pending in the application.

[0018] With respect to the rejections of the claims over the cited prior art, Applicants respectfully argue that the present claims are distinguishable over the prior art of record. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

[0019] In view of the foregoing, Applicants submit that claims 1, 5-8, 11-13, 17-19, and 23-24, all the claims presently pending in the application, are patentably distinct from the prior art of records and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest time possible.

[0020] Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

[0021] Please charge any deficiencies and credit any overpayments to Attorney's Deposit  
Account Number 09-0441.

Respectfully submitted,

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